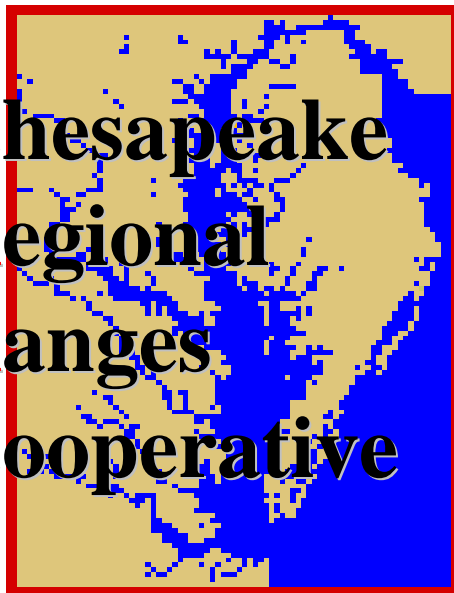


NDIA 4th Annual Test and Training Symposium

Chesapeake Regional Ranges Cooperative Update

**Chesapeake
Regional
Ranges
Cooperative**



Presented by
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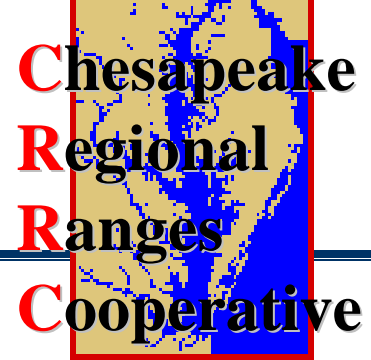
Warfighter Support Initiatives Background

- **Fleet Support Initiatives began in June 95 at NAWCAD**
 - **Exploratory in Nature**
 - **Methodology: (Iterative Process)**
 - **Initial Dialogue with Command Staffs to Discuss Shortcomings/Needs**
 - **Provided On-site Command Overview and Focused Resources & Capabilities Briefs to Command Staffs**
 - **Conducted Capabilities Briefs and Facilities Tours**

CKKC Warfighter Training Support Team Objective

*To Provide Readiness and Training Support to the
Warfighter through use of the Resources and
Capabilities of the Chesapeake Regional Ranges
Cooperative.*

Chesapeake Regional Ranges Cooperative and Partnerships



In FY96, Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, began exploring the feasibility of using the RDT&E complex to enhance Naval aviation operator training. By the end of FY97, the scope expanded to include not only Naval (USN and USMC) training, but Joint Warfighters, including the Army and Air Force. By February 99, Aberdeen Test Center, Fort A.P. Hill, CINCLANTFLT and NSWC CDSA Dam Neck had joined the effort and the Chesapeake Regional Ranges Cooperative (CRRC) was formed.

- **NAWCAD, Patuxent River, MD**
 - NASA Wallops Flight Facility, Wallops, VA
- **US Army Aberdeen Test Center, Aberdeen, MD**
 - Maryland Army National Guard, 2nd BN, 115th INF
- **US Army Fort A.P. Hill, Bowling Green, VA**
- **Naval Surface Warfare Center, Combat Direction Systems Activity, Dam Neck, VA**
- **Commander in Chief US Atlantic Fleet (CINCLANTFLT N3/5/7)**

Chesapeake Regional Ranges Cooperative (CRRC) & Partnerships

Chesapeake
Regional
Ranges
Cooperative

Aberdeen Test Center
Aberdeen PG, MD

Maryland National Guard

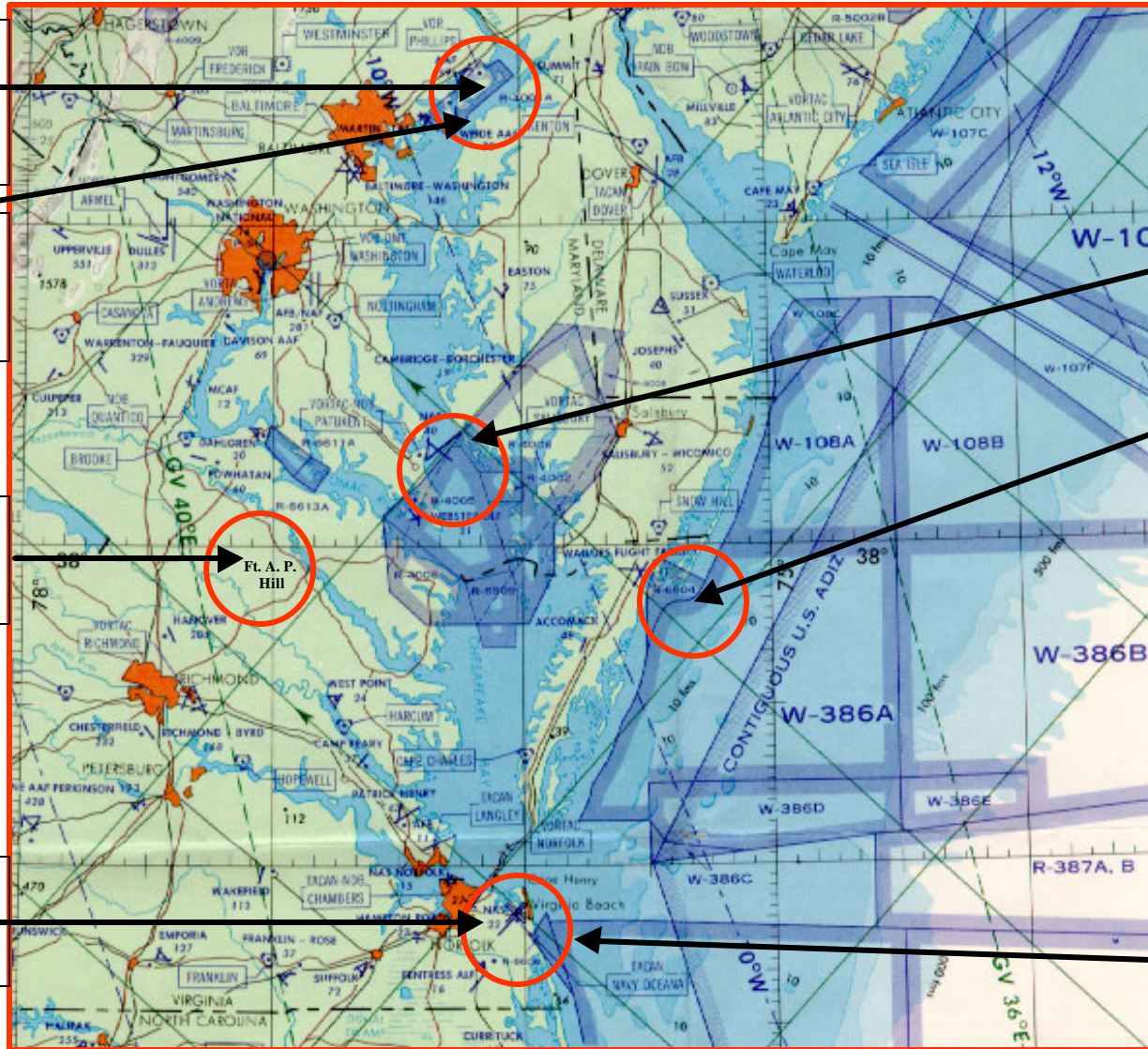
Fort A. P. Hill
Bowling Green, VA

CINCLANTFLT
Norfolk, VA

NAWCAD
Pax River, MD

NASA Wallop
Wallops, VA

NSWC-CDSA
Dam Neck, VA





Patuxent River Complex

Capabilities/Benefits

- Close Proximity to the Warfighter:
 - U.S. Joint Forces Command & Operational Units:
 - Atlantic Fleet, Marine Forces Atlantic, Force Command, Air Combat Command
- Special Use Restricted Airspace and Waterspace
 - Chesapeake Test Range (R-4002, 4005, 4006, 4007, 400 8, & 6609)
 - Mid-Atlantic Warning Areas (W-386, W-72, W-122)
- Fully Instrumented and Integrated Flight Test/Training Range
 - Range Operations Control Center with Real-Time Connectivity to
 - NASA Wallops Flight Center, FACS FAC VACAPES
 - Tracking Instrumentation Diversity -- Fixed and Portable
 - Real-Time Telemetry Processing and Display
 - Marine Operations & Targets
 - Targets Diversity -- Real and Constructed (Air, Land, Sea)
 - Video and Film Metrics & Documentation
 - EW Test Measurements & Signal Simulations (Fixed, Mobile, Portable)
- Final Environmental Impact Statement (EIS) - ROD signed 17 May 99
 - Includes provisions for 3,300 flight hours for military training support

Chesapeake Test Range

Restricted Areas R-4002/5/6/7/8

Approximately 2,400 square miles

Surface to 85,000 feet

Remote Instrumentation Sites



Cedar Point Emitter Site

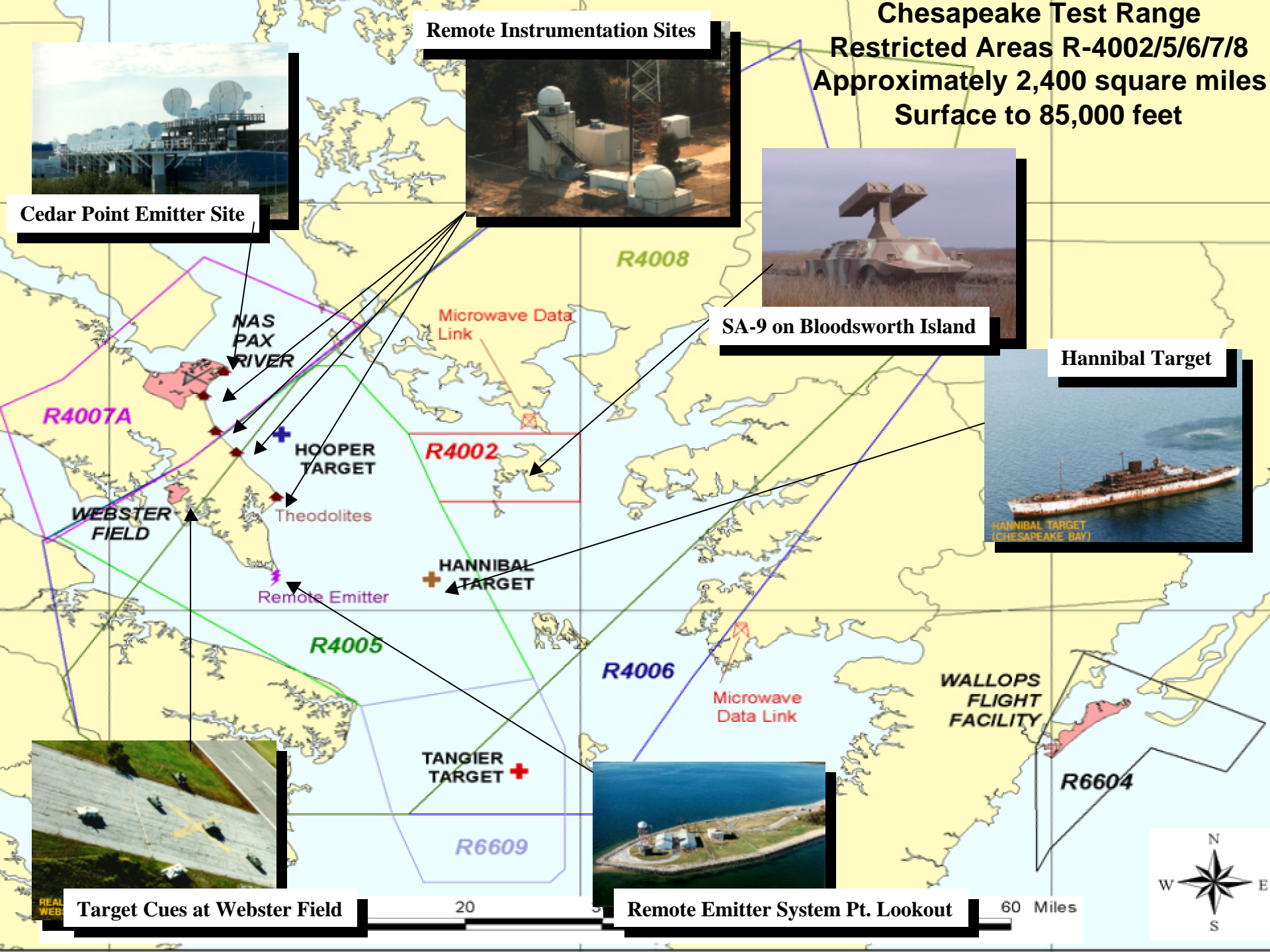


SA-9 on Bloodsworth Island

Hannibal Target



HANNIBAL TARGET
(CHESAPEAKE BAY)



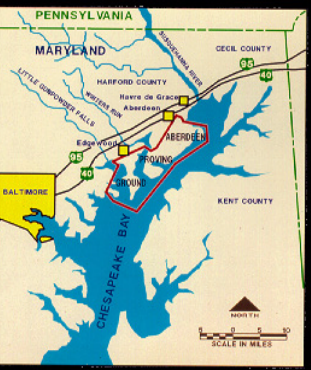
Target Cues at Webster Field



Remote Emitter System Pt. Lookout

60 Miles

U. S. Army Aberdeen Test Center (ATC)



US Army Aberdeen Test Center (ATC) Aberdeen, MD

- 72,000-acres, land and water controlled by ATC
 - Special-use Restricted Airspace
 - Littoral Environment
- H-field Tank Gunnery Range
 - Live Fire
- Phillips Army Airfield - 8,000 ft runway
- Real-World, Foreign, Land-Based Threat Vehicles with Operational Military Intelligence Brigade
- Diverse T&E Resources and Capabilities (Automotive, Weapons, Ammunition, Live-Fire Vulnerabilities/Lethality, etc.)
- Underwater Explosives and Surface Testing (UNDEX) Super Pond - 1070' x 920' x 150' Deep, Elliptical-Shaped)

Aberdeen Test Center

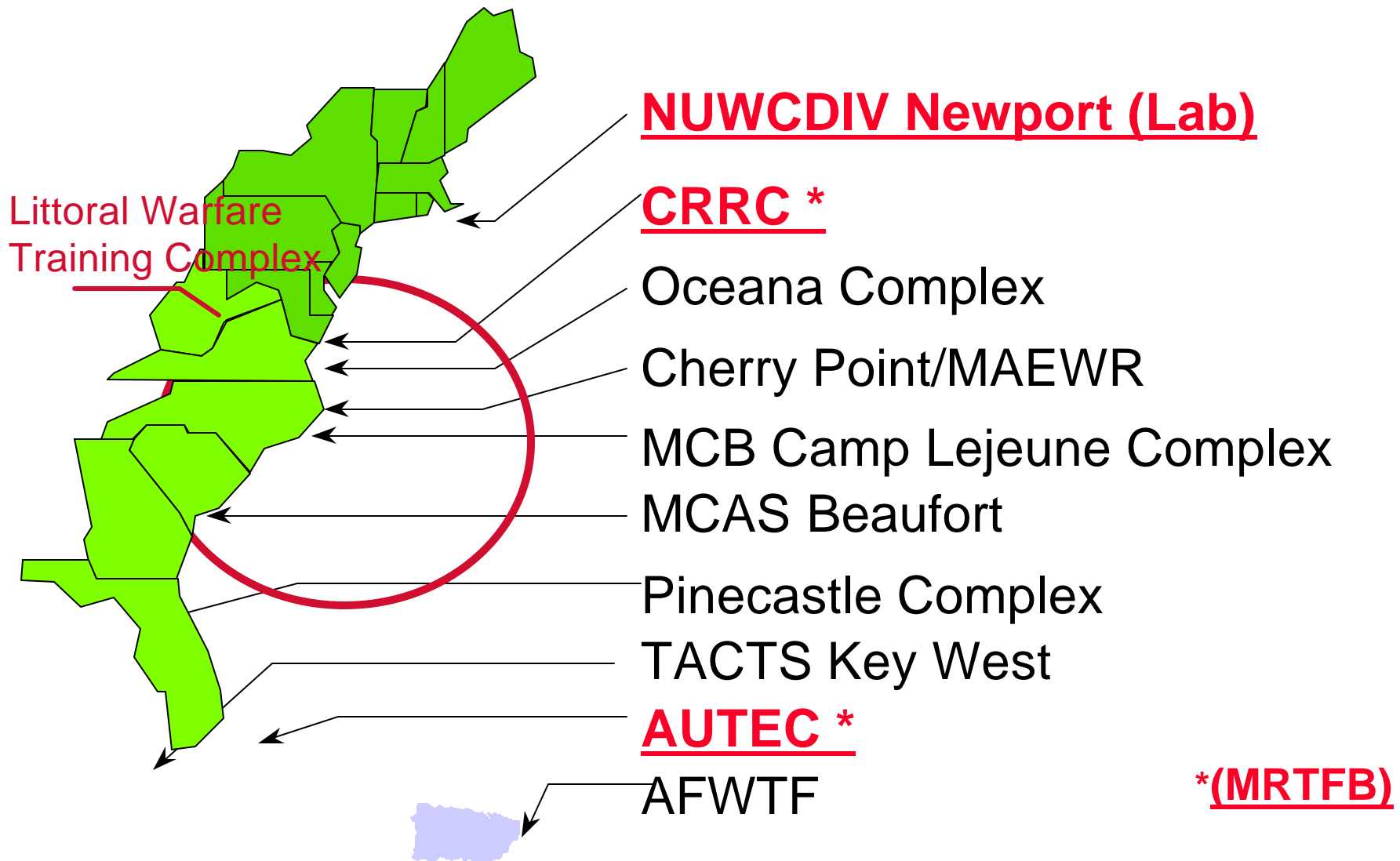


• Real-World, Land-Based Threat Vehicles (unclassified list):



- Tanks: T72, T72M, T69, T62, T55, T54
- Air Defense: SA-9, ZSU-23-4
- Artillery: 2S1, 2S3M, MM21, DAC665T, MAZ543, ZIL135
- Tracked Carriers: ACRV, BMP1, BMP2, MTLB, MTLBV, MTP-LB
- Wheeled Armor: BRDM2, BTR60, BTR70, BTR80, R145BM
- Utility Trucks: GAZ66, IFAW50, MAGIRUS, MB1924, UAZ469

Littoral Warfare Training Complex (LWTC)





Combat Direction Systems Activity (CDSA)

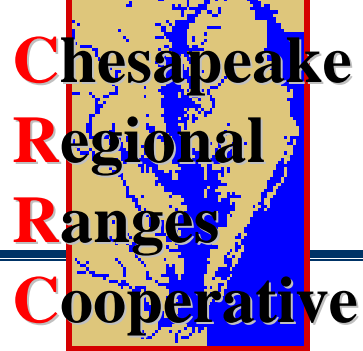
- Plans, designs, creates, updates, tests and delivers operational programs and workstation-based tactical command display programs for cruiser, destroyer, frigate and helicopter combatants; communications programs for integrated systems, updates to these computer programs, which meet evolving fleet requirements.
- Navy's First Capability Maturity Model (CMM) Level 3 Organization
- 10 Surface Ship Mockups shared with Fleet Combat Training Center
 - Battle Force Integration Test (BFIT) via the Distributed Engineering Plant (DEP).
- Cooperative Engagement Capability (CEC) land-based test site
- Live data/voice VHF/UHF Comms with Ships & Aircraft operating in the area
- Live radar support including SPS-48, SPS-49, SPS-55, M92
- Electronic connectivity w/ Norfolk Naval Base, NSWC Dahlgren, NAWC Patuxent River and ACSC Wallops Island provide a broad range of electronic signals for Joint testing and training

Fort A.P. Hill



- Aviation Training Support
 - 77,000-acre complex
 - Standard Restricted Airspace 5,000 feet AGL to Surface
 - Controlled Firing Area (CFA) up to 10,000 feet (advance coordination)
 - Tactical Operations using Combat Assault or Air Assault Tactics
 - Helicopter Gunnery
 - Airborne Drop Zone
 - 2400m x 600m
 - Assault Air Strip capable of handling four C-130 and C-17 aircraft
 - Combat Village
 - Live-Fire Ranges
 - Small arms and mortars
 - Tank Gunnery and Field Artillery
 - Guided Missile (TOW or DRAGON)

CRRRC Multiple Warfare Areas and Levels of Readiness Training Support



- **Warfare Areas:** Strike Warfare: Time Sensitive Targeting/Strike, Air to Air Warfare, Electronic Warfare: ESM, ECM, ECCM, Mine Warfare, Anti-Submarine Warfare, Anti-Surface Warfare, Littoral Warfare, Special Operations, Combat Search and Rescue (CSAR), Close Air Support (CAS), Ground & Air Forward Air Control (FAC), Bomb Damage Assessment (BDA), Ground and Paratrooper Maneuver
- **Multi-Level Training Support:**
 - UNIT LEVEL/ WARFARE SPECIFIC:
 - Single or Multiple aircraft- Single, Section, Division & Large Package Strike
 - Special Warfare-Underwater Explosive, Live Fire Special Boat, LOC, NEO,CAS
 - Ground Warfare-EW, C4I, Explosive, Field Take Down, NEO,CAS
 - INTERMEDIATE LEVEL/ MULTIPLE WARFARE:
 - Composite strike package (e.g. E-2C, F-14, F/A-18)
 - FLEETEX, COMPTUEX, HARMEX, MSLEX
 - ADVANCED: COMBINED/JOINT FORCES:
 - CJTFEX, JTFEX,

CRRC Progress

Chesapeake
Regional
Ranges
Cooperative

- JTFEX Participation: CJTFEX 96-2, JTFEX: 97-1, 97-2, 97-3, 98-1, 98-2, ENTERPRISE JTFEX, 99-1, 99-2, 00-1, 00-2, CJTFEX 01-1
 - Hosted the USAF/ANG Air Refuel Operations:
(up to 11 KC-135s / 150 personnel)
 - SOF Events at Webster Field involving VC-6 Pioneer UAVs
 - Target and Signal Simulations (local & remote) for ELINT, COMINT, HUMINT, IMINT
 - Long Range Air Strike(s) & MINEX conducted from the CV
 - Time Sensitive Targeting/Strike Scenario (00-2, 01-1)
 - Global Hawk HAE-UAV Military Utility Assessment (00-2)



Time Sensitive Targeting in Support of JTFEX



- Threat Targets Provided in Support of JTFEX 00-02, 01-1 & 01-3 (planned)
- ATC Foreign Vehicles Deployed to LWTC with Patuxent River's Mobile C4I Capability



- Provided Realistic Mobile Target Issue for 2nd Fleet JTFEX Participants
- Expected to be Recurring JTFEX Training Requirement

CRRC Progress (continued)

Chesapeake
Regional
Ranges
Cooperative

- Redeployment of USA's XVIII Corps Airborne Unit (325th ARBN INF BN) from Ft. A.P. Hill, VA. to Ft. Bragg, NC via Pax River using USAF Airlift (MAR 97)
- 9th Air Force IG ORI Exercise (OCT 97)
- CVW- 3 STRIKEX PAX RIVER (APR 98)
- 224th MI BN (AE) Guardrail (RC-12) Dragon's Breath 01 Exercise (Apr 01)
 - ELINT/COMINT Scenario Generation (14-3hr Flights over 7 days)
- Fleet Aerial Target Support:
 - PMS-400 CSSQT, SURFLANT, CEC
 - 100+ VANDAL MQM-8G Launches
 - BQM-34S, BQM-74E



Guardian/Hellfire Missiles FBE-H Exercise (Sept 00)

Exercise Objective

Primary

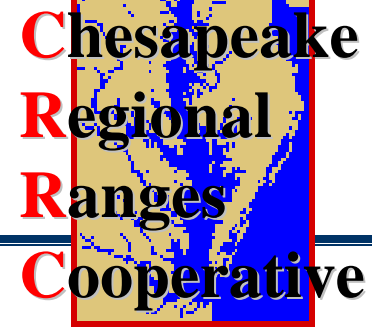
A CONOPS demonstration of the ability to strike at littoral targets from a small Navy combatant using a remotely designated laser and Hellfire missile system

Secondary

Coincidentally with the above objective, demonstrate the capability to detect a littoral target via NP-3 ISAR imaging, identify the target with a UAV asset, destroy the target, and provide BDA of target in a coordinated NCW event



CRRC Progress (continued)



- Fleet COMPTUEX, FLEETEX, MISSILEX Support:
 - East Coast Target Hulk Preparation
 - Airborne Command & Control (FTS, TSPI, TM R³)
- Numerous Squadron/Unit Level Events (USN, USAF, ANG, USA):
 - Field Carrier Landing Practice (FCLP) (During Fentress Runway Repairs)
 - ACLS/PALS Events
 - F-14 Flight Director (VF-2, VF-101)
 - F-14 TARPS Over Flights
 - Air-to-Ground Weapons Delivery (Blue Bombs and Strafing)
 - AIRLANT MINEX: VFA 136 (Aug 99), CVW-17, 3, and 8 (9/00 planned)
 - CPRWL -5/VP-5,16 & 45, CPRWL-11/VP-8 & 26
 - VFA 34 MSLEX/BOMBEX (Aug 99)
- U. S. Army Military Intelligence BN Test & Training
 - 319th MI BN
 - 338th MI BN





Exercise Blue Crab 99 & 00

- Joint Training Exercise, Jun 99 and May 00
 - Conducted at Aberdeen Test Center
 - Lauderick Creek Training Area
 - Combined Land, Sea, Air Task Force
 - ~ 750 Personnel from 25 Active duty, Reserve & National Guard Units:
 - Army, Navy, Air Force, Marine Corps, & Coast Guard
 - No Injuries or Mishaps
 - Exceptional Training Value was Gained



Operation Charlie Rock 2000



- July 17-21- 82nd Airborne
- 114 personnel para-drop into Phillips AAF



- Dismounted ground maneuvers
- Live Firing Exercises of 60-MM mortars
- Javelin missile firing

SPECWARCOM



- SPECWARCOM Boat Units & Navy SEAL Teams Train at ATC
- Joint Training for 11-Meter RIB & Mk-5 Boats with Air-Guard A-10 & Navy Seahawk Rotary Wing Aircraft

- Live-Fire Training from Sea & Air
- Exercises Conducted May, June & July 01
- Future exercises planned on monthly basis



Progress (continued)

- Have Established and Maintain Dialogue with Several Atlantic Fleet and Joint Operational Commands:
 - US Joint Forces Command (formerly USACOM)
 - CINCLANTFLT
 - COMNAVAIRLANT
 - COMSECONDFLT
 - SPECIAL OPERATIONS COMMAND (SOCOM)
 - ARMY XVIII AIRBORNE CORPS
 - MARFORLANT
 - 75th RANGER REGIMENT
 - NAWC-Training Systems Division, Orlando, FL
 - NSWC-Combat Direction Systems Station Dam Neck, VA
 - NSWC-DD Coastal Systems Station, Panama City, FL
 - Air Combat Command (ACC) Langley AFB
 - U.S. Army Training & Doctrine Command (TRADOC)
 - Air National Guard Bureau, Andrews AFB
 - Baltimore Naval Reserve Center
 - Naval Special Warfare Group II
 - Fleet Information Warfare Center (FIWC)

High Level Visibility

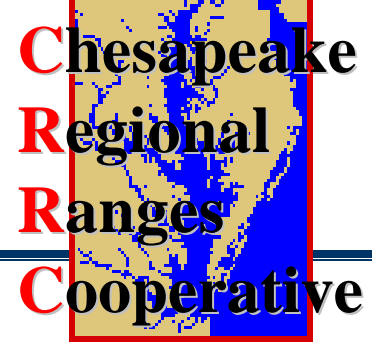
- **Office of the Deputy Undersecretary of Defense:**
 - John Gehrig, DOT&E Deputy Director for Resources & Ranges (July 99)
 - Mike Parmentier, Director for Readiness, Policy & Programs (July 99)
- **Commander Naval Air Forces Atlantic:**
 - VADM Mazach (Sept 96)
 - VADM Mobley (May 99, May 00, July 00, Dec 00)
- **CINCLANTFLT:**
 - RADM E. E. Christensen, N7(Oct 96)
 - RADM Bryant, N8 (May 99)
 - RDML Ulrich, N3/5/7 (Aug 99)
 - RDML Rutherford, N3/5/7 (July 00/Feb 01)
- **Commander Second Fleet:**
 - Commander, Carrier Group Four, RADM R. Naughton (Jan 00)
 - Commander, Carrier Group Four, RDML B. Calhoun (Oct 00/Feb 01)
- **Commander Third Fleet, VADM Dennis McGinn (Jan 00)**
- **Deputy Commanding General, XVIII CORPS, BG Ryneska (Jan 00)**
- **CNO RADM Al Harms, Director of Assessments (N81)**

Range/Command Interoperability

- Joint Forces Command Connectivity to support Experimentation
 - Staff Assigned & Participating in Planning Events
- Reach out to Gulf Ranges in support of Warfighter Training
- National Ranges and Laboratories
 - MC 02/FBE-J
 - Roving Sands
 - JCIET



Warfighter Support Initiatives



- ATR/Pax River Complex Usage & Scheduling
 - Web-based Warfighter (Fleet) Users Guide
 - Range Period Set-Asides
- Weapon Impact Scoring System (WISS)
- Laser Evaluator System (LES)
- Improved and Expanded Surface OPFOR
 - Emitter Generation (AAA & SAM Threats and C4I)
- Highly Mobile Multi-spectral (Visual, IR & radar) Land-Based Vehicle Target Cues
- F/A-18C Part Task Trainer (PTT)
- ATC Support of SBU's

Summary

Establishment of the Chesapeake Bay Regional Range Cooperative

- Improved Synergism and Benefits between Participants Across Multiple Mission Areas (R&D, DT&E, OT&E, Readiness Training & Experimentation)
 - Joint T&E Efforts:
 - Soft Impact Acoustic Scoring Capability for Army Artillery Testing at NASA Wallops
 - Fleet Battle Experiments (FBE) G & H
 - Joint Combat Identification Evaluation Team (JCIET 2000 & 2002)
 - Increased Range Utilization with a Broader Customer Base
- Stronger Working Relationship with Naval & Joint Operational Forces
- “WARFIGHTER” Deploys Better Equipped, Trained and Combat Ready

Questions ?????